

# Tennessee Deaths 2002

March 2004

The Tennessee Department of Health

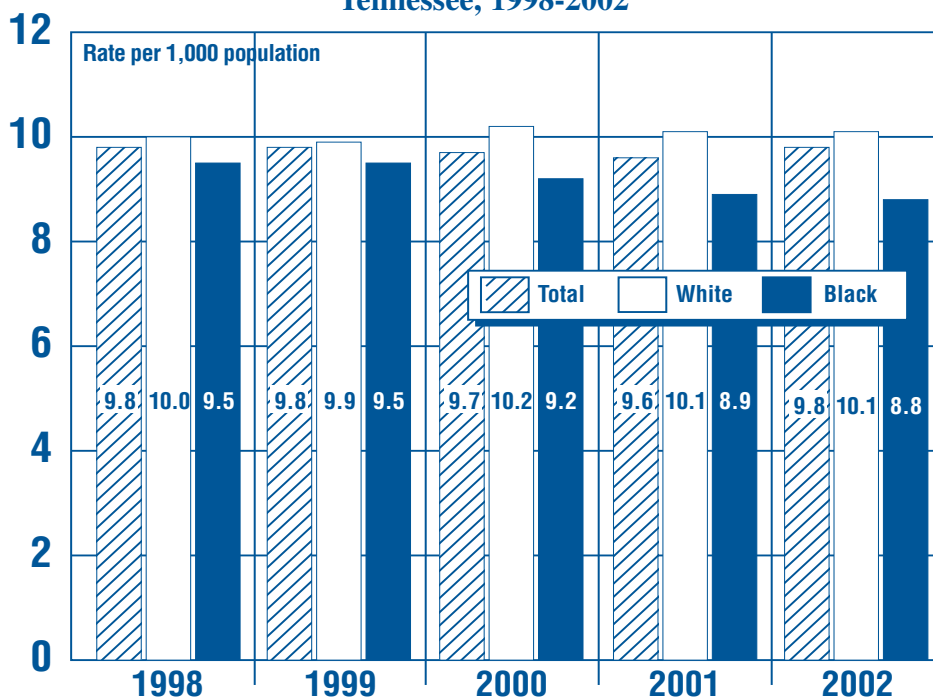
*Tennessee's death data provides information on 2002 final mortality data for state residents. Resident data includes events which occurred to residents of the state irrespective of where the events took place. Certificates filed with the Office of Vital Records supplied the data for this report.*

Over the past century, improvements in scientific technology and research have created a better quality of life. Tennesseans now have the potential for increased longevity of life and reductions in illnesses.

The overall death rate remained fairly steady from 1998 to 2002, as the total population increased 6.6 percent. While the mortality rate for whites remained constant over the five-year period, the rate for blacks decreased 7.4 percent from 9.5 per 1,000 population to 8.8 from 1998 to 2002.

Age-specific death rates for 2002 show the total rates increasing over three times for the age group 45-64 to the group 65-74. The highest levels were for the population groups 85 years and older, and rates for blacks were higher than those for whites for every age group. The black infant death rate of 18.4 was 2.6 times higher than the white rate of 7.1 per 1,000 births.

**Death Rates by Race, Resident Data  
Tennessee, 1998-2002**



Population estimates used to calculate rates were revised August 2003. (See Note on last page)

**Number of Deaths by Age and Race, with Rates per 1,000  
Population, Resident Data, Tennessee, 2002**

Age Groups	Total	Rate	White	Rate	Black	Rate
Total	56,513	9.8	47,791	10.1	8,502	8.8
Under 1*	727	9.4	418	7.1	299	18.4
1-4 years	106	0.3	72	0.3	32	0.5
5-14 years	165	0.2	112	0.2	50	0.3
15-24 years	844	1.1	615	1.0	216	1.3
25-44 years	3,604	2.1	2,715	2.0	859	3.0
45-64 years	11,116	8.0	8,849	7.5	2,203	11.9
65-74 years	10,405	26.7	8,858	25.7	1,503	36.0
75-84 years	15,594	64.2	13,823	63.4	1,740	72.1
85+ years	13,946	163.0	12,327	163.3	1,598	162.9

\*Rate for deaths under age one are per 1,000 live births. All other age groups are per 1,000 population. Total includes deaths of other races and deaths with race not stated.

Tennessee's ten leading causes of death accounted for 44,549 or 78.8 percent of the total 56,513 deaths in 2002. Diseases of heart and malignant neoplasms combined, accounted for 28,711 or 50.8 percent of the total deaths. The codes used for cause of death were from the Tenth Revision International Classification of Diseases.

*Notes: Age-adjustment is a technique that removes the effects that differences in age distributions have on mortality rates for two or more groups being compared. For 2002, the standard population used in the direct method calculations was revised to the 2000 United States estimated population, as recommended by the National Center for Health Statistics. These revised age-adjusted figures may result in rates that differ from previous years.*

### Leading Causes of Death (ICD-10 Codes) with Rates and Age-Adjusted Rates per 100,000 Population Resident Data, Tennessee, 2002

Cause	Number	Rate	Age-Adjusted Rate
Total Deaths	56,513	976.6	988.9
1. Diseases of heart (I00-I09, I11, I13, I20-I51)	16,205	280.0	284.7
2. Malignant neoplasms (C00-C97)	12,506	216.1	214.8
3. Cerebrovascular diseases (I60-I69)	3,982	68.8	70.8
4. Chronic lower respiratory diseases (J40-J47)	3,007	52.0	52.5
5. Accidents (V01-X59, Y85-Y86)	2,715	46.9	47.2
Motor vehicle accidents (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0-V89.2)	1,234	21.3	21.3
6. Diabetes mellitus (E10-E14)	1,746	30.2	30.3
7. Influenza and pneumonia (J10-J18)	1,706	29.5	30.5
8. Alzheimer's disease (G30)	1,296	22.4	23.5
9. Intentional self-harm (suicide) (X60-X84, Y87.0)	778	13.4	13.3
10. Chronic liver disease and cirrhosis (K70, K73-K74)	608	10.5	10.2

### Number of Infant and Neonatal Deaths by Race with Rates per 1,000 Live Births Resident Data, Tennessee, 2002

Infant Deaths	Number	Rate	Neonatal Deaths	Number	Rate
Total	727	9.4	Total	456	5.9
White	418	7.1	White	250	4.2
Black	299	18.4	Black	203	12.5

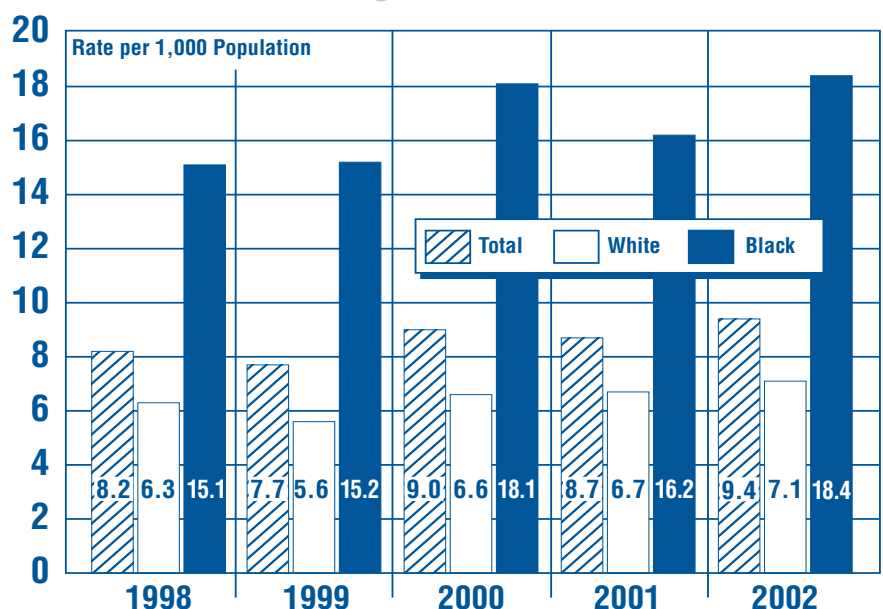
Infant Death - A death of a live-born infant under one year of age.  
Neonatal Death - A death of a live-born infant under 28 days of age.

Tennessee had 727 infant deaths in 2002. The total infant mortality rate per 1,000 live births was 9.4. The number of white infant deaths was 418 with a mortality rate of 7.1. The number of black infant deaths was 299, and the rate was 18.4 per 1,000 live births. The total number of neonatal deaths was 456 with a rate of 5.9. There were 250 white and 203 black neonatal deaths with corresponding rates of 4.2 and 12.5 per 1,000 live births.

### Infant Death Rates by Race, Resident Data Tennessee, 1998-2002

In 2002, Tennessee's infant death rates by race were the highest for the period 1998-2002. While the rates for the five-year period fluctuated, the black rate remained highest for each year. The 2002 black infant death rate of 18.4 increased 21.9 percent over the 1998 rate of 15.1 per 1,000 live births.

Early prenatal care and educating mothers on the importance of proper nutrition and good health habits, and informative programs like the "Back to Sleep" campaign, have been important factors in the ongoing effort to decrease infant deaths. While these deaths overall have declined since the early 1900's, infant death reduction will continue to be a high priority for health professionals.



*Tennessee's violent death data primarily focuses on assault (homicide) and intentional self-harm (suicide) deaths. Also provided is information on firearm deaths, which includes accidental deaths as well as assault and intentional self-harm deaths due to firearm use. In addition to the 2002 violent deaths, there were three deaths from legal intervention.*

- During 2002, there were 466 assault deaths among residents of Tennessee. The corresponding death rate was 8.1 per 100,000 population.
- In 2002, 240 or 51.5 percent of the total assault deaths occurred among the black population.
- Of the total 2002 assault deaths, 74.5 percent were males while 41.0 percent of the total were black males.
- The number of intentional self-harm deaths for 2002 was 778 with a rate of 13.4 per 100,000 population.
- The white population accounted for 714 or 91.8 percent of the total 2002 intentional self-harm deaths.
- Of the total 2002 intentional self-harm deaths, 78.5 percent were males while 71.6 percent of the total were white males.
- In 2002, intentional self-harm was the ninth leading cause of death in Tennessee.

The 2002 assault death rate for blacks was 24.7 per 100,000 population. This rate was 5.4 times the rate of 4.6 for

whites. The 2002 intentional self-harm rate for whites was 15.1. This rate was 2.8 times the rate of 5.4 for blacks.

### Number of Assault and Intentional Self-Harm Deaths by Race and Gender, with Rates per 100,000 Population Resident Data, Tennessee, 2002

	Assault		Intentional Self-harm	
	Number	Rate	Number	Rate
Total	466	8.1	778	13.4
White	219	4.6	714	15.1
White Male	154	6.6	557	24.0
White Female	65	2.7	157	6.5
Black	240	24.7	52	5.4
Black Male	191	41.8	46	10.1
Black Female	49	9.5	6	1.2
Other Races	6	6.7	11	12.3
Other Male	2	4.5	8	18.2
Other Female	4	8.8	3	6.6

In 2002, there were 24 assault deaths among children under 15 years of age. The highest rate for assault deaths occurred to persons 20-24 years, while the highest rate for intentional self-harm was for persons 75-84 years of age.

### Number of Assault and Intentional Self-Harm Deaths by Age with Rates per 100,000 Population, Resident Data, Tennessee, 2002

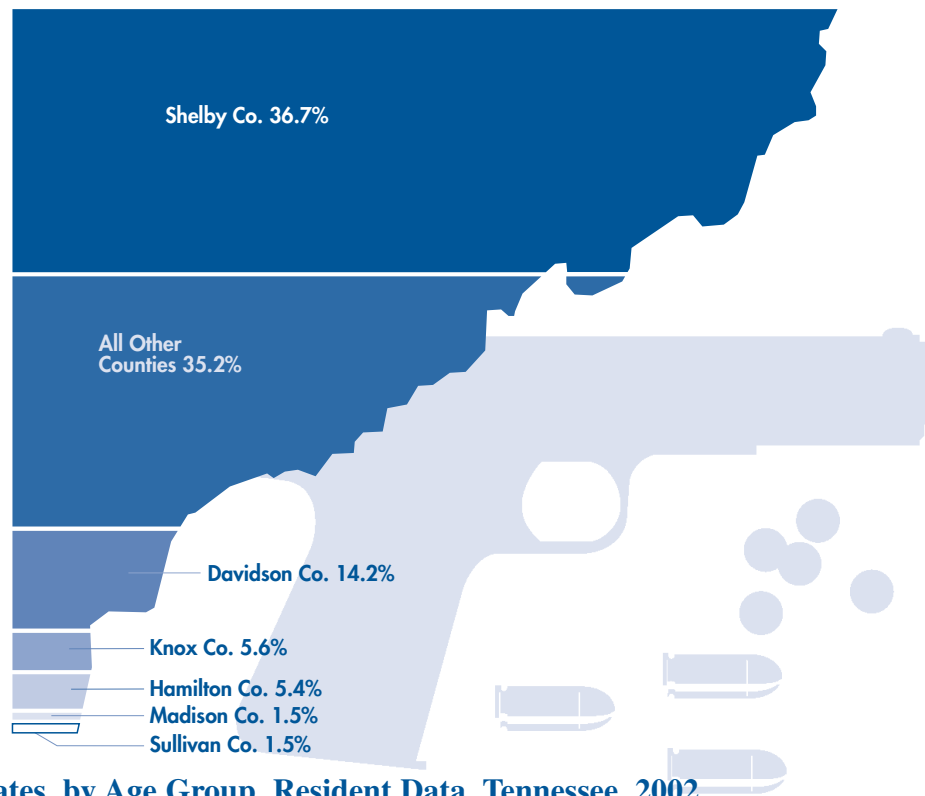
Age Groups	Assault		Intentional Self-harm	
	Number	Rate	Number	Rate
Total	466	8.1	778	13.4
Under 1*	9	0.1	-	-
1-9 years	12	1.7	-	-
10-14 years	3	0.7	-	-
15-19 years	43	10.7	35	8.7
20-24 years	84	21.4	39	9.9
25-29 years	48	12.0	72	18.0
30-34 years	58	14.0	83	20.1
35-44 years	96	10.8	178	20.0
45-54 years	53	6.5	146	17.9
55-64 years	29	5.0	86	15.0
65-74 years	16	4.1	72	18.5
75-84 years	7	2.9	55	22.6
85+ years	6	7.0	11	12.9

\*Rate for deaths under one are per 1,000 births. All other age groups are per 100,000 population.

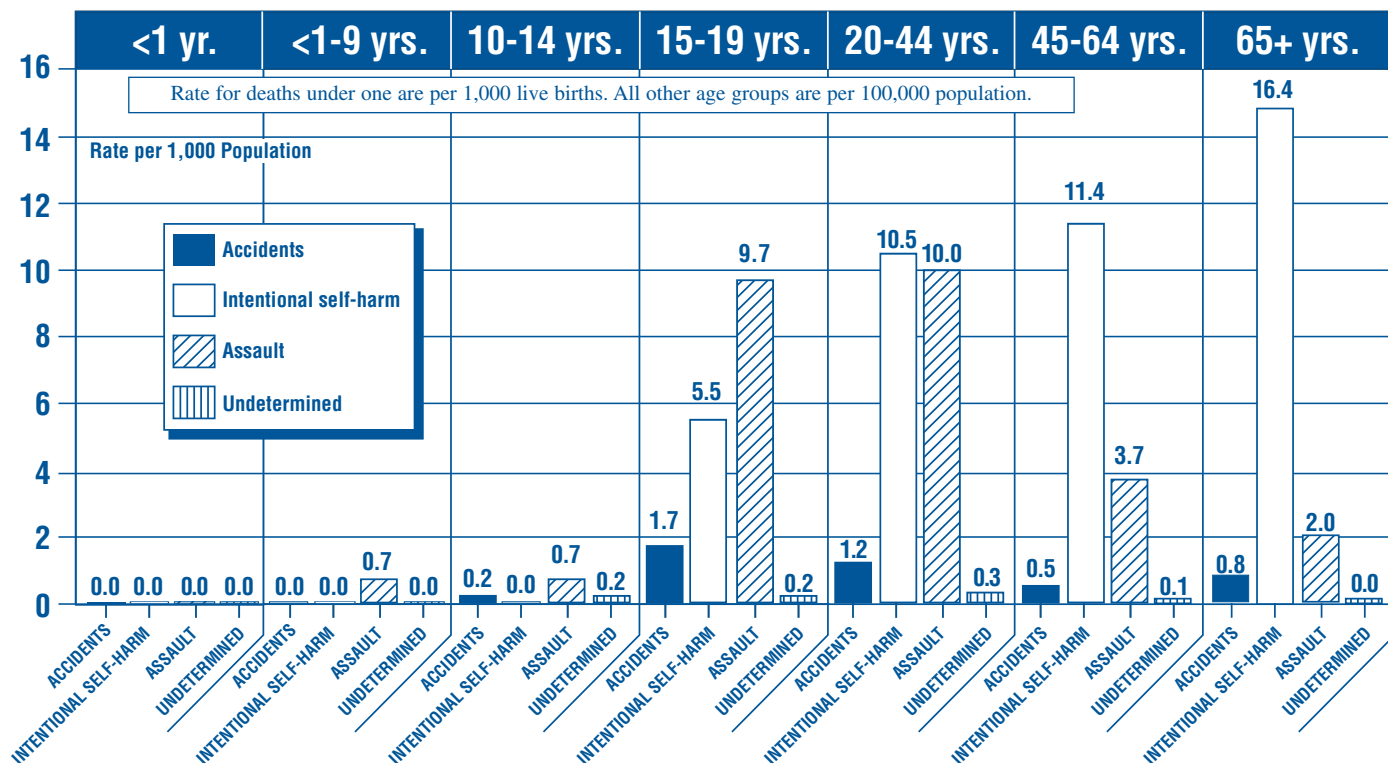
In 2002, Tennessee's assault mortality by county of residence reveals the highest numbers for residents of Shelby and Davidson Counties. These two counties accounted for 50.9 percent of the state's total number of assault deaths, with over one-third of the total assault deaths occurring in Shelby County.

In 2002, 5 children under the age of 10 years died from firearm injuries. Of these 5 deaths, all were assault deaths, and 2 of these assaults were to children under 5 years of age. While accidental death is the leading cause of death for young children, violence toward children and youth is of increasing concern. For children ages 10-14, there were 5 firearm deaths. Of these deaths, 1 was undetermined, 1 was accidental, and 3 were assault deaths. For the age group 15-19, assault was the leading cause of firearm deaths. The assault rate for firearm injury was highest for the 20-44 age group, while the intentional self-harm rate was highest for people 65+ years.

### Tennessee's Assault Deaths by Metropolitan and Rural Counties, Resident Data, 2002



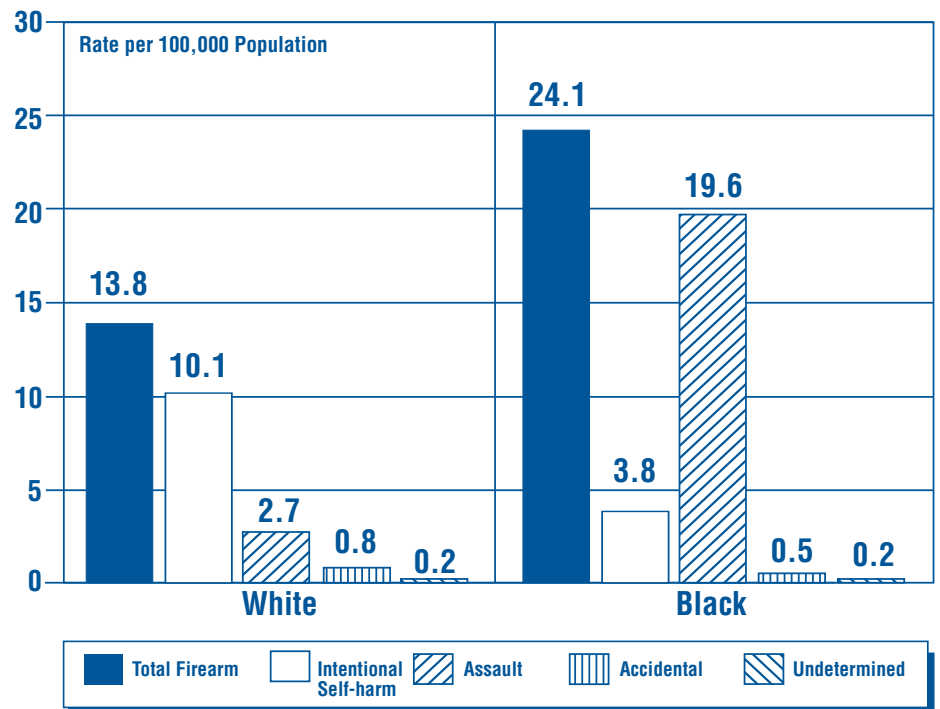
### Firearm Death Rates, by Age Group, Resident Data, Tennessee, 2002



Deaths attributed to firearm injury are classified according to ICD-10 codes as follows: accident codes W32-W34; intentional self-harm codes X72-X74; assault codes X93-X95, and undetermined whether accidentally or purposely inflicted, codes Y22-Y24.

Tennessee had 654 firearm deaths for white residents and 234 for black residents in 2002. The firearm death rate for the white population was 13.8 per 100,000 population. The rate for blacks of 24.1 was 1.7 times greater than the white rate. The intentional self-harm firearm mortality rate for whites was 2.7 times greater than the rate for blacks, while the assault firearm death rate for blacks was 7.3 times greater than the white rate. The accidental firearm death rate for whites was 1.6 percent higher than the black rate. The rates (0.2) for undetermined cause were the same for whites and blacks.

**Firearm Death Rates, by Race  
Resident Data, Tennessee 2002**



**Number of Firearm Deaths by  
Race and Gender, with Rates per  
100,000 Population, Resident Data  
Tennessee, 2002**

	Number	Rate
Total	902	15.6
White	654	13.8
White Male	540	23.3
White Female	114	4.7
Black	234	24.1
Black Male	195	42.7
Black Female	39	7.6
Other Races	12	13.4
Other Male	8	18.2
Other Female	4	8.8

For 2002, firearm death rates by gender show that black males had the highest rate (42.7) per 100,000 population. The lowest firearm mortality rate of 4.7 was for white females.

Violent deaths have become an important health issue as it appears that violent behavior has grown to be the course of action for conflict, emotional distress, and criminal activity; but health programs alone are not sufficient to deal with this complicated problem. Implementing prevention programs involves the cooperative efforts of public health, mental health, criminal justice, social services, and professional education. Reducing these preventable deaths is imperative in the goal toward increased longevity of life.

More detailed county level mortality data may be obtained by contacting the Tennessee Department of Health, Division of Health Statistics or at our website.



**NOTE:** The population estimates for Tennessee used to calculate the rates in this report were based on figures prepared from the 2000 census on August, 2003 by the Division of Health Statistics.

**These revised population figures may result in rates that differ from those previously published.**

2002  
Total Population  
5,786,527

2002  
White Population  
4,726,899

2002  
Black Population  
970,161

Please visit the Division of Health Statistics and Health Information Tennessee (HIT) pages on the Tennessee Department of Health website by selecting Statistics and Data at:

<http://www.tennessee.gov/health>

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Cordell Hull Building,  
Nashville, Tennessee, 37247-5262

Marguerite Lewis, Director  
For additional information please contact:  
George Plumlee, Coordinator,  
(615) 741-1954



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Tennessee Department of Health  
Policy, Planning, and Assessment  
Division of Health Statistics  
425 5th Avenue North, 4th Floor  
Nashville, Tennessee 37247-5262